

Remarks

I. Status of the Claims

Applicants note that the Office Action indicated that claims 98 and 99 were pending. However, Applicant wishes to point out that claims 98 and 99 were cancelled in Applicant's Preliminary Amendment filed June 27, 2003.

Upon entry of the foregoing amendment, claims 1-12, 85-97, 100, 101 and 115-150 are pending in the application, with claims 1, 115 and 138 being the independent claims. Claims 13 to 84, 98, 99, 102-114, and 130 to 134 are cancelled without prejudice or disclaimer of the subject matter therein. Claims 90, 101 and 137 are withdrawn from consideration. Claims 1, 2, 9, 10, 85-87, 91, 92, 93, 96, 97, 115, 122, 123, 125, 126 and 135 are sought to be amended. Support for these amendments may be found in the specification and originally-filed claims and therefore do not introduce new matter. Entry and consideration of this amendment is respectfully requested.

Amendment to the specification is sought to add reference to SEQ ID NOS. In accordance with 37 C.F.R. § 1.821(g), this submission includes no new matter. Entry of the amendment is respectfully requested.

Based on the above amendments and the following remarks, Applicant respectfully requests that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

II. Examiner's Preliminary Remark

In the Office Action dated February 22, 2006 (hereinafter "the Office Action"), the Examiner asserts that claims 140-150 are misnumbered and has renumbered them 138-148.

The present application is a divisional of Application No. 09/984,664, and presents subject matter cancelled pursuant to a restriction requirement in Application No. 09/984,664. Accordingly, the present application was filed with claims 1-135 and, via a preliminary amendment filed with the application, claims 13-84, 98, 99, 102-114 and 130-134 were cancelled, and new claims 136-150 were added. Applicant respectfully believes that the present claims are correctly numbered and have proceeded herewith according to the original numbering. Applicant respectfully requests clarification of this matter from the Examiner.

III. Elections/Restrictions

The Examiner has reasserted the previous Restriction Requirement and has withdrawn from consideration claim 101 and, in-part claims 126-129, 135 and 138-148. *See* Office Action at page 4 Solely to advance prosecution, and not in acquiescence to the Examiner's rejection, Applicant has amended claims 126 and 135 to remove the dependency from claim 101.

Claims 90 and 137 have also been withdrawn by the Examiner as being drawn to non-elected species. *Id.* Upon the identification of otherwise allowable subject matter in

generic or linking claims, Applicant respectfully requests that the non-elected species be rejoined and examined in accordance with 37 C.F.R. § 1.146.

III. Information Disclosure Statement and Drawings.

Applicant acknowledges the Examiner's consideration of all art cited in Information Disclosure Statements in the present application and in co-pending related applications. *Id.* The Examiner has noted as acceptable the drawings received on June 24, 2003 and has noted the proposed drawing changes. *Id.* Applicant respectfully requests that the Examiner indicate in the next communication from the Office that the proposed drawing changes are acceptable.

IV. Claim Interpretation

At pages 4-5 the Examiner has requested further amendment to claim 1 to provide "added clarity." Applicant has amended claim 1 in accordance with the Examiner's suggestion, but does not acquiesce to any suggestion that the previous version of the claim lacks clarity.

V. Objection to the Specification

At page 5 of the Office Action the Examiner has objected that Figures 13-15 and 29 recite nucleotide sequences without providing sequence identifiers. The Examiner further requested that Applicant peruse the entire specification and identify all nucleotide sequences which consists of 10 or more contiguous nucleotides or 4 or more amino acid residues by their SEQ ID NOS. Applicant has amended the specification to insert the

sequence identifiers and note that the sequences identified by the Examiner and the Applicant are present in the sequence listing as filed. Accordingly, Applicants request reconsideration of the requirement to submit a CFR containing the SEQ ID NOS and paper copy of the sequence listing.

V. Objections to the Claims

At page 5 of the Office Action the Examiner has objected to claims 115 for a minor typographical error, and to claims 126 and 135 for dependence from a non-elected invention. By the foregoing amendments, Applicant has rendered moot these objections.

VI. Rejections under 35 U.S.C. § 112

At pages 6-8 of the Office Action, the Examiner has rejected claims 1-12, 85-89, 91-100, 115-129, 135, 136 and 138-148, asserting that such claims are allegedly indefinite under 35 U.S.C. § 112, second paragraph. Applicant respectfully traverses these rejections. However, solely to advance prosecution, and not in acquiescence to the Examiner's rejection, Applicant has amended the claims. Applicant will address, in turn, each aspect of the pending rejection as it may have been applied to the presently pending claims.

At page 6 of the Office Action, the Examiner asserts that it is "unclear how 'multiple' reiterative oligonucleotides can be synthesized by the incorporation of a terminator," and that, therefore, claim 1 is allegedly indefinite. Claims 2-12, 100, 126-129, 135 and 138-148 were rejected for depending from claim 1. Claim 1 has been amended to recite that multiple reiterative oligonucleotide transcripts are synthesized by repeating steps (a) and (b). Applicant therefore believes that the present rejection of

claims 1-12, 100, 126-129, 135 and 138-148 under 35 U.S.C. § 112, second paragraph, is overcome and Applicant respectfully requests that the Examiner withdraw the rejection.

Claim 115 has been rejected “for reasons analogous” to claim 1, and claims 116-129, 135 and 138-145 for their dependence from claim 115. Claim 115 has been amended to recite, in step (c) “synthesizing multiple oligonucleotide transcripts from said target polynucleotide by abortive reiterative transcription.” As the specification clearly provides for the method of producing multiple oligonucleotide transcripts, Applicant respectfully submits that claim 115 is not indefinite. Applicant respectfully requests reconsideration and withdrawal of the rejection of claim 115-129, 135 and 138-146.

At pages 6-7 of the Office Action, the Examiner rejected claim 6 for using the alleged trademark “primase.” Those of ordinary skill in the art understand that the term “primase” refers to a form of RNA polymerase that, in bacteria, is the product of the dnaG gene. Thus, the term “primase” is a proper descriptive term for an enzyme. Whether or not “primase” is also a trademark does not render indefinite the term.

At page 7 of the Office Action, the Examiner rejected claim 85 for recitation of “detecting oligonucleotide comprised of repeat sequences synthesized.” Claims 86-89, 91-100 and 135-136 have been rejected for dependence from claim 85. In view of the amendment to claim 85, Applicant believes that the rejection of claims 85-89, 91-100 and 135-136 has been overcome and respectfully requests that the Examiner reconsider and withdraw the rejection.

At page 7 of the Office Action, the Examiner rejected claim 97 and 125 which recite “wherein immobilizing comprises” and “said chain terminator,” respectively, as

allegedly lacking a proper antecedent basis. Claims 97 and 125 have been amended. Further, a person of ordinary skill would comprehend how hybridizing a target sequence to a capture probe results in immobilization. Applicant respectfully submits that the amendments overcome the Examiner's rejections of these claims and respectfully requests withdrawal of the rejections.

At page 8 of the Office Action, the Examiner has rejected claim 138 for being self-dependent in part, and claims 139-148 for depending from claim 138. Applicants respectfully traverse this rejection. The Examiner appears to confuse pending claim 140, which depends from claims 1, 115, and 138, with pending claim 138, which is independent. Applicant submitted new claims 136-150 in a preliminary amendment filed June 24, 2006, wherein claims 138 and 140 were properly numbered. Accordingly, Applicants respectfully submit that claim 138 does not depend from itself and further that the dependency of claim 140 is not in error. Applicant requests that the Examiner reconsider and withdraw the rejection.

VII. Rejections under 35 U.S.C. § 102

The Examiner has rejected claims 85-87, 91, 92 and 135 under 35 U.S.C. § 102(b) as allegedly anticipated by Daube *et al.* The Examiner also rejected claims 85-87, 91, 92, 135 and 136 under 35 U.S.C. § 102(b) as allegedly anticipated by Berg *et al.* The Examiner further rejected claims 85, 85 [sic], 91-93, 135 and 136 under 35 U.S.C. § 102(b) as allegedly anticipated by Kacian *et al.* Applicant respectfully traverses these rejections.

Solely to advance prosecution and not in acquiescence of the Examiner's rejection, Applicant has amended claim 85 to depend from, and therefore incorporate the

limitations of claim 1. Applicant therefore respectfully submits that the Examiner's rejection is now moot and respectfully requests withdrawal of the rejections.

VIII. Rejections under 35 U.S.C. § 103

The Examiner has rejected claims 87-89, 94-97 and 100 under 35 U.S.C. § 103(a) as allegedly obvious over Kacian *et al.* in view of Berg *et al.* and Nasu *et al.* Applicant respectfully traverses this rejection.

Solely to advance prosecution and not in acquiescence of the Examiner's rejection, Applicant has amended independent claim 85, from which claims 87-89, 94-97 and 100 depend, to depend from, and therefore incorporate the limitations of claim 1. Applicant therefore respectfully submits that the Examiner's rejection is now moot and respectfully requests withdrawal of the rejection.

IX. Obviousness Type Double Patenting

At page 14-15 of the Office Action, the Examiner provisionally rejected, under the doctrine of obviousness-type double patenting, various of the pending claims over various claims of co-pending Application Nos. 10/600,581 and 10/607,136. Applicant respectfully traverses this rejection.

Application Nos. 10/600,581, 10/607,136 and the present application are all divisional applications arising from a restriction requirement in Application No. 09/984,664, and were filed prior to the issuance of Patent No. 7,045,319 B2. Under 35 U.S.C. § 121:

A patent issuing on an application with respect to which a requirement for restriction under this section has been made, or on an application filed as

a result of such a requirement, shall not be used as a reference either in the Patent and Trademark Office or in the courts against a divisional application or against the original application or any patent issued on either of them, if the divisional application is filed before the issuance of the patent on the other application.

Accordingly, the claims of co-pending Application Nos. 10/600,581 and 10/607,136 cannot be properly cited under the doctrine of obviousness-type double patenting against those of the present application. Applicant respectfully requests that the Examiner reconsider and withdraw these rejections, or hold the present provisional rejections in abeyance, pending the identification of otherwise allowable subject matter, at which time Applicant will consider filing any necessary terminal disclaimers.

As pages 13-15 of the Office Action the Examiner has provisionally rejected claims 1-12, 85-89, 91-97, 100, 115-136 and 138-150 under the doctrine of obviousness-type double patenting over claims 11-17 and 19-27 of co-pending Application No. 10/425,037 and claims 136-147 of copending Application No. 10/686,713. Applicant respectfully requests that the Examiner hold the present provisional rejections in abeyance, pending the identification of otherwise allowable subject matter, at which time Applicant will consider filing any necessary terminal disclaimers.

Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicant believes that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for

allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

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